Proposal for
Planning, Landscape Architecture, and Environmental Consulting Services
Big Sur Coastal Trail Master Plan

Submitted to:
State Coastal Conservancy

By:
Questa

In Association with:

GreenInfo Network
Bicycle Solutions
Steven C. Christiano
Garcia & Associates (DBE)

June 1, 2007

QUESTA
ENGINEERING CORP.

Civil, Environmental & Water Resources

May 31, 2007

State Coastal Conservancy
1330 Broadway, Suite 1300
Oakland, California 94612
Attn: Trish Chapman

Subject: **Proposal for Big Sur Coastal Trail Master Plan**

Dear Ms. Chapman

Questa Engineering Corporation, in association with GreenInfo Network, Bicycle Solutions, and Steven C. Christiano, is pleased to submit this proposal for the Big Sur Trail planning study. To supplement our study team in completing the existing conditions inventory and constraints analysis, we have also included Garcia and Associates (biological and cultural resources specialists), a Caltrans-certified Disadvantaged Business Enterprise (DBE).

The Big Sur Coastal Trail would provide a unique route for trail users and visitors along a very special area of California's central coast, and when constructed will surely constitute one of the finest trail experiences in California, if not the entire United States. The enclosed information outlines our study team's proposed work on the project, including a project task/personnel budget that demonstrates our understanding of the project through allocation of available funding.

Questa Engineering Corporation, a small business located in Pt. Richmond, CA, is recognized as one of the leading engineering and environmental design firms for trails planning in environmentally sensitive areas. We are not a traditional civil engineering firm; our work primarily consists of public interest and natural resources oriented projects, including stream restoration, fish passage barrier removal engineering, and trail planning and design. Questa has completed numerous trail feasibility studies located within environmentally sensitive areas. For instance, we are currently working on the planning of the Bob Jones City to Sea Trail, which would follow San Luis Obispo Creek in the unincorporated area of San Luis Obispo County from the city of San Luis Obispo to Avila Beach. We are also currently working on the Napa River Bay Trail, which will pass through several existing and restored tidal marshes in Napa County. In addition, we have designed and constructed trails in a number of sensitive areas, including the Shollenberger Marsh Trail near Petaluma and the Laguna de Santa Rosa trail near Sebastopol.

GreenInfo Network is a public interest non-profit firm located in San Francisco. The firm specializes in providing map-based (GIS) information to a variety of governmental and non-governmental organizations and non-profits to assist them in planning and decision making. GreenInfo Network has state-of-the-art capabilities and a very experienced staff, capable of meeting all foreseeable project graphics and GIS needs. GreenInfo Network would complete the majority of the project GIS work.

John Ciccarelli, of **Bicycle Solutions**, is a nationally recognized expert in bicycle planning, including pedestrian and bicycle safety issues and safety management strategies. Mr. Ciccarelli will conduct the feasibility/safety analysis of the trail section along Coast Highway 1.

Steven C. Christiano is an experienced planning process and meeting facilitator consultant who will facilitate Steering Committee and public involvement.

We have structured the scope of work and proposed budget to reflect the needs of the Coastal Conservancy and the local community, and have identified strategies and tasks to ensure the highest

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possible chances for a successful project outcome. Our strategy reflects our careful consideration of the potential environmental impacts of trail construction, as well as the potential impacts of increased public usage in sensitive habitats and in neighborhood areas. We also know the importance of carefully listening to and incorporating community knowledge and concerns, and bring expertise in creative design to minimize potential impacts, both of which will be key components of the project.

We look forward to the opportunity of working with you on this important project. Please do not hesitate to call me at (510) 236-6114 x 206 should you have questions or comments regarding this proposal and our fee estimate.

Sincerely,

Jeff Peters, Principal
Questa Engineering Corporation

JP/th

ref: 260175L1

Proposal

for

Big Sur Coastal Trail Master Plan
Planning, Landscape Architecture, and Environmental Consulting Services

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Submitted to

State Coastal Conservancy
1330 Broadway, Suite 1300
Oakland, California 94612
Attn: Trish Chapman

Prepared by

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In Association with:

GreenInfo Network
Bicycle Solutions
Steven C. Christiano
Garcia and Associates (DBE)

Questa Project #260175

June 1, 2007

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1. Point of Contact

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2. Project Approach

Background. The Big Sur Coastal Trail Master Plan is envisioned to provide a precise plan for implementing a portion of the California Coastal Trail along the 75-mile Big Sur coast. The Master Plan will inventory existing conditions, analyze site opportunities and constraints, provide design criteria and a draft alignment, and chart a course for phasing, funding, and implementation of the approved Trail Master Plan. The Trail was identified in previous planning efforts as needing substantial improvement, since much of the route is currently along Highway 1. The Master Plan is needed as a next step to define feasible alignments, achieve consensus on planning objectives, and to identify specific projects and improvements that can be funded for implementation by partner agencies and stakeholders as part of a continuous trail system, also recognizing the importance of trail loops.

Project Issues. The placement of trails within natural resource areas is a widely debated issue. Local, state and federal planning agencies have adopted plans that call for multi-use public access within natural areas that will increase the public's awareness of our rich natural environment. However, many community members and regulatory agencies are concerned about trail impacts to wildlife, private property disruption, safety and accessibility of existing trails, and design of trails along roads. In addition to partner agencies and community members, developing workable solutions involves close collaboration between scientists, planners, and engineers from many disciplines. Our team values the importance of efficiently combining technical information, planning expertise, and facilitation skills to achieve consensus regarding public access. We believe our approach works well to synthesize complex issues into successful project solutions. We are experienced in low-impact trail design, road safety feasibility analysis, trail alignment, and components of trail design to minimize potential impacts. Our philosophy is to design projects that will minimize conflicts with adjacent uses; in our experience:

- Innovative design and technology can be utilized to minimize potential impacts.
- Designs should minimize implementation and maintenance costs, consistent with project goals.
- Input from the people who will manage the trail is an essential part of plan development.
- Close communication throughout the design process results in a better project.
- Siting facilities on existing roads and disturbed areas, where appropriate, may minimize intrusion.
- Setbacks should be incorporated to separate uses.
- Boardwalks and clear-span bridges should be used for non-motorized travel where possible.
- Utilizing permeable paving and alternative trail surfaces minimizes hardscape yet provides universal access.
- Habitat restoration, education, and enhancement opportunities should be provided along the trail, where appropriate.
- Use and management guidelines should be incorporated into the project.
- Utilizing screening, vegetated buffers and created swales to preclude access to sensitive areas.
- A balanced approach is essential to achieve consensus.

Community Involvement. One of the most important components of the Master Plan will be working with project stakeholders, including agencies, property owners and members of the public, to develop a Plan that reflects community concerns yet provides opportunities for a continuous trail, with safe and enjoyable public access in a treasured environment. For the Big Sur Coastal Trail (BSCT), members of the community and individual stakeholders are resources with a vast amount of knowledge regarding trail features, locations, problem areas, points of interest, sensitive areas, etc. Through the outreach process, we hope to gather this information and incorporate it into project decision-making. This can include Internet surveys as well as new technologies, such as providing community opportunities for georeferenced mapping, GPS mapping, Google Earth KML file compilation, and/or GEOPDF'S that can be marked up and input into a project geodatabase. The geodatabase should include open access to the public for review and submittal of information, as well as secured access for use by the planning team. Our goal is to provide many different ways for interested parties to provide input regarding the Trail, to acknowledge the concerns and ideas of the community, potential trail users, agency managers, regulatory authorities, and

others. These ideas and concerns form the vision for defining and implementing the Plan, and each person's contribution can be acknowledged. To ensure that this outreach is meaningful, we have included facilitator Steven Christiano, who has guided decision-making for other significant resource areas, including Lake Tahoe and Point Reyes. **Table 1** outlines our Work Plan to efficiently accomplish each project task.

Mapping and GIS. The work products, including draft trail alignment maps, and the final report will be map- and graphics-oriented. We will primarily utilize existing databases for development of the existing conditions information and the constraints analysis. We will request help from the Coastal Conservancy and other key interested parties in contacting agencies with map and GIS data, including information on existing trails and parcel and ROW/easement information. The compiled information will largely be summarized in tables, with sketches, notes, and ground photos illustrative of concepts linked to the map products. We will emphasize the development of clear, concise, and easily understood maps and supporting photographs, tables, and line drawing sketches. The metadata will clearly show the origin of all of the compiled data used to support decision-making and recommendations on alternatives and route selection.

Engineering Analysis. An engineering feasibility analysis will be completed by one of Questa's experienced trails engineers, in conjunction with a bicycle and pedestrian safety expert, and the project landscape architect. This will most efficiently be accomplished by using a pre-assembled trail log recording form that will be filled out in the field and that will note opportunities, hazards, constraints, and possible solutions. A field will also be provided for comments. The trail log will be prepared using a GPS and laptop or PDA, with data recorded on the fly. Conceptual sketches of the existing conditions and proposed design solution will be prepared, not to-scale engineered drawings.

Master Plan. In the interests of staying within the overall budget, we will de-emphasize text descriptions of existing conditions, constraints, engineering feasibility review, etc. For instance, the requested section on conformance with LCPs will be brief. We will coordinate with study team partners, such as county planning staff, Coastal Commission, and SCC staff, to identify issues for the report. In addition, the engineering analysis will not emphasize the preparation of detailed, to-scale cross sections in an AutoCAD format. We will develop protocols for timely submittal of comments and revisions for incorporation into the final draft Plan.

Action Plan. As with the Master Plan, the Action Plan will emphasize use of summary tables, charts, diagrams, and map graphics to identify recommended project priorities and implementation scheduling, lead or implementing agencies for trail design and construction, trail management entities, design standards, and planning level construction design, environmental review and permitting, mitigation, and construction costs.

Project Management and Progress Reporting. While it is recognized that Project Management is a key element of the project, it can also be time consuming and expensive. We will develop a summary progress report format that will be used to quickly convey to the study team management project status with respect to budget, schedule, deliverables, and key technical, policy and public process issues.

Cost Option. Detailed engineering cross sections prepared to scale in an AutoCAD format are proposed as a cost option. We anticipate that there may be as many as 50 to 60 cross sections needed (one for every 1.5 to 2 miles of trail). Costs for preparation of the cross sections are anticipated to be on the order of $15,000.

Table 1. Work Plan

Task	Approach	Key Team Members *Desired Outcomes*
Task 1. Establish Goals and Objectives for Master Plan Facilitated meetings to review draft goals and objectives for the trail, and to receive input on project issues and outcomes. These goals and objectives will provide guidance for BSCT implementation.	We will facilitate the discussion of issues and outline the process for decision-making. This discussion should also outline desired methodologies for information gathering for project efficiency. We will ntroduce key staff, review study objectives, collect available data; develop meeting schedule .	J. Peters, S. Christiano M. Henderson, L. Orman *Input and recommendations on Trail goals and objectives. Meeting agenda/ presentation, handouts. Establish communication protocols.*
Task 2. Prepare Existing Conditions Report The Report will rely on available data, supplemented with information obtained in the field, already in hand (GIN field data), and input from the community and project stakeholders. Features identified in the RFS will be included in the report, such as existing trails, parking, access points, easements, habitat areas, etc. Information gathered in the field includes: ▪ Structures, fences, gates, parking ▪ Views/vista points ▪ Existing vegetation and unique areas to be avoided ▪ Utilities; vaults, boxes, wires, etc. ▪ Drainage patterns. ▪ Sensitive habitat areas, including wetlands, geologic features, nesting sites, and other resources.	We will compile the baseline data into a geodatabase, maps and report. We will utilize GIS data from the Caltrans study, SCC deed information, background information from project stakeholders and previous studies, and community input. We will meet with agency partners and interested parties as part of the data collection, and input this information into the report and geodatabase where appropriate.	Questa, GIN, J. Ciccarelli, GANDA (as needed) *Existing Conditions Report, including maps and geodatabase.*
Task 3. Develop Design Criteria This task entails analysis of existing goals, policies and standards from the myriad of project stakeholders, and identification of workable design criteria for the BSCT. The design criteria should reflect the management needs, operational responsibilities and regulatory authority of project stakeholders, as well as community concerns regarding the Trail. The Design Criteria will form the basis for decision-making regarding trail alignment, type, amenities and other key outcomes.	We will draft design criteria for the trail for circulation by SCC. The design criteria will be a synthesis of existing goals, objectives, policies, and standards from overlapping jurisdictions, as well as recommendations from community input. This will be compiled into a recommended program for the BCST, to be circulated for stakeholder approval.	Questa, J. Ciccarelli *Draft Design Criteria, based upon existing adopted goals, objectives and standards, and tailored for the needs of the BSCT.*

Task	Approach	Key Team Members *Desired Outcomes*
Task 4. Prepare Opportunities and Constraints Analysis This task includes identification of opportunities and constraints for development of a continuous trail, including separation from Highway 1, areas where Class II/III trails are feasible, spur trails, access points, parking needs, bridge and wetland crossings, habitat features, etc. Where needed, protocols for wildlife protection will be identified (GANDA), as well as landslides, geotechnical constraints, wetlands, and roadbed suitability analysis (AGS)	We propose to use an efficient and integrated approach to gather data for database input for the bicycle improvement opportunity analysis. Information will be input at key points (bridges, parking areas, habitat features, driveways, etc.) at maximum one-mile intervals, to provide a matrix of site opportunities and constraints associated with provision of Class II bike lanes. We will identify safety issues, crossing options, parking needs & other trail needs.	Questa , GIN, John Ciccarelli, GANDA, *Opportunities and Constraints Analysis Key point mapping of constraints and opportunities, trail matrix of issues by trail reach.*
Task 5. Define the Proposed Trail Alignment(s) This task includes identification of potential trail alignments, including a continuous pedestrian path (Class I wherever feasible),a continuous bicycle alignment (Class II where feasible, potentially Class III in places), and trail spurs and loops where possible for coastal access, links to park areas, vista points, etc.	Utilizing input from the Opportunities and Constraints Analysis will be a key to identifying feasible alignments and locations for trail improvements. We will use trail reaches that have common design challenges, and will define appropriate trail elements that serve different types of trail users. Mapping and reports will indicate needed infrastructure improvements, such as sliver widening, underpasses, ramps, boardwalks, bridges, parking improvements, etc.	Questa, GIN, John Ciccarelli *Map and trail matrix identifying trail options, alternative alignments, needed improvements, infrastructure, etc. This analysis will include a brief description of consistency with applicable LCP/Coastal Act policies.*
Task 6. Prepare Preliminary BSCT Plan Preliminary Plan will be prepared for electronic review and submission, summarizing all work to date.	All working information will be compiled into a Preliminary Plan for review.	Questa, GIN *Preliminary BSCT Plan, maps and report*
Task 7. Prepare Action Plan The Action Plan will include: ▪ Individual implementation projects to complete Trail sections ▪ Recommended priorities and phasing for project continuity ▪ Next steps for project implementation ▪ Priority project list, including details and cost ▪ Management needs, lead agency and financing options ▪ Funding and grant opportunities, as well as legislative needs	This Task includes a phasing and funding component to allow informed decision making regarding trail implementation. Recognizing that segments of the trail will be implemented as separate projects by different entities, the Plan must identify overall project cost, phasing and funding priorities, management entities and options for long-term implementation of project elements. This Plan will be reviewed and revised based on stakeholder input.	Questa *Action Plan, including Priority Projects, Next Steps, Management Options, and Funding Mechanisms.*

Task	Approach	Key Team Members *Desired Outcomes*
Task 8. Prepare Master Plan The Master Plan will include all work to date, including revisions to the Preliminary Plan. The Plan will include descriptive features including: ▪ Typical design character. ▪ Typical design elements, including hardscape, benches, bicycle racks, interpretive displays. ▪ Trail surfacing and width. ▪ Bridges and boardwalks. ▪ Preliminary cost estimates, prioritization and phasing ▪ Trail surface, width and clearance ▪ Access improvements along trail, ▪ Spur trail alignments, including loop access, ▪ Pavement repairs, infrastructure, retaining walls, etc. ▪ Recommended striping, fencing, gates, signage, etc. ▪ Bridge retrofit/replacement recommendations. ▪ Accessible trail and ADA infrastructure components. ▪ Provisions for multiple use. ▪ Emergency vehicle considerations ▪ Interpretive signage and educational components. ▪ Wildlife and habitat restoration elements, if applicable.	This report will include a comprehensive project description for inclusion in subsequent environmental review, cost estimates for project elements, phasing recommendations, etc., as well as identification of necessary permit requirements and potential project partners. The Master Plan is intended to provide a long-term guide for the logical implementation of a continuous trail. As a multi-function document, it can be used as a master document for tiering into implementation projects for individual segments, used to apply for grant funding or legislative action, and for discussion regarding trail management, responsible lead entities, trail users, safety issues, etc. It is hoped that partnering agencies will utilize the document to guide planning efforts and implementation projects (such as Caltrans road projects) to incorporate trail elements where appropriate. Community support of the Plan elements will also be important to guiding implementation efforts.	Questa, GIN *Final Draft BSCT Master Plan*
Task 9. Attend/Facilitate Meetings We will utilize a combined approach, with professional facilitation of most of the project meetings, as well as focused meetings for specific project issues.	In our experience, a combination of field and formal meetings is useful to provide a guided setting for discussing project issues in a neutral environment. In addition to desired outcome (e.g. finalized goals and objectives), meetings can be tailored for individual trail reaches, use issues, agency/stakeholder need, etc.	Steve Christiano, Questa GIN, J. Ciccarelli (as needed)
Task 10. Project Management (15 progress reports) Efficient project management is essential to timely completion of project tasks within budget. In addition to coordination of stakeholder and community input, coordination with SCC staff to identify issues that may affect budget and schedule will be identified as part of project management. It is likely that informational needs and project outcomes may shift as a result of stakeholder input, community needs and definition and refinement of trail alternatives. We are confident that these issues can be resolved efficiently through effective project management.	Questa utilizes a project management system along hierarchical lines with an independent quality control check. Mr. Peters will provide senior quality control review of all deliverables. Project scheduling and time management employ critical flow path methodology. Project milestones and key deliverables are identified at the outset of the project and a schedule developed and agreed upon. This will be entered into a PC-based management software system, which gives bi-weekly reports of labor use by work task and compares work completion (%) with project estimates.	Questa - Jeff Peters

3. Project Staffing

Questa is a small civil and environmental engineering, planning, and design firm. Questa offers services to clients throughout coastal northern and central California for planning, public works, environmental restoration, resource conservation and water resource management projects. The firm strongly subscribes to an interdisciplinary approach in planning solutions to complex environmental and engineering problems. As a small company, our senior staff necessarily maintains a high degree of involvement and management control over individual projects, and a close client-consultant relationship. We are experienced in involving the public in the design process, overall project organization, budgeting and scheduling, preparation of design plans and specifications, and contract administration. We have expertise in the development of Master Plans, as well as concept plans and improvement plans for parks and open-space areas, and creek and riparian habitat areas. Our plans for these areas often incorporate environmental education and interpretive facilities, trails, parking and visitor service facilities.

Our recent experience includes projects throughout northern and central California, including natural area park design and trails planning. In most projects, we use a community-based approach to solicit ideas, identify conflicts, and achieve consensus among participants and stakeholders on project issues. It is important to involve all project stakeholders early on, so that concerns can be addressed and goals and expectations can be identified. When each stakeholder is acknowledged, a successful plan can be developed that balances community priorities with an agency's management needs and budget. What sets Questa apart from our competitors is that we develop real design solutions to real problems, based on our capabilities and experience in translating conceptual designs into working construction drawings. We focus on project-specific issues and develop reasonable, cost-effective alternatives that are thoroughly vetted through engineering and environmental feasibility analysis, as well as public and local community input.

We have assembled a project team that is uniquely qualified to efficiently complete project tasks. Team members include: **GreenInfo Network** (mapping and database management), **Bicycle Solutions** (Bicycle/pedestrian traffic safety constraints), and **Steven Christiano** (facilitator), in addition to **Garcia & Associates** for as-needed consultation (biological resource analysis, archaeology constraints). Our team is flexible, with multiple capabilities adaptable to revisions in scope and information needs. **Figure 1** shows our Team Organizational Chart. Below are summaries of the study team's project roles and key team members' individual experience. Resumes are included in **Section 6a**.

Questa (Point Richmond)

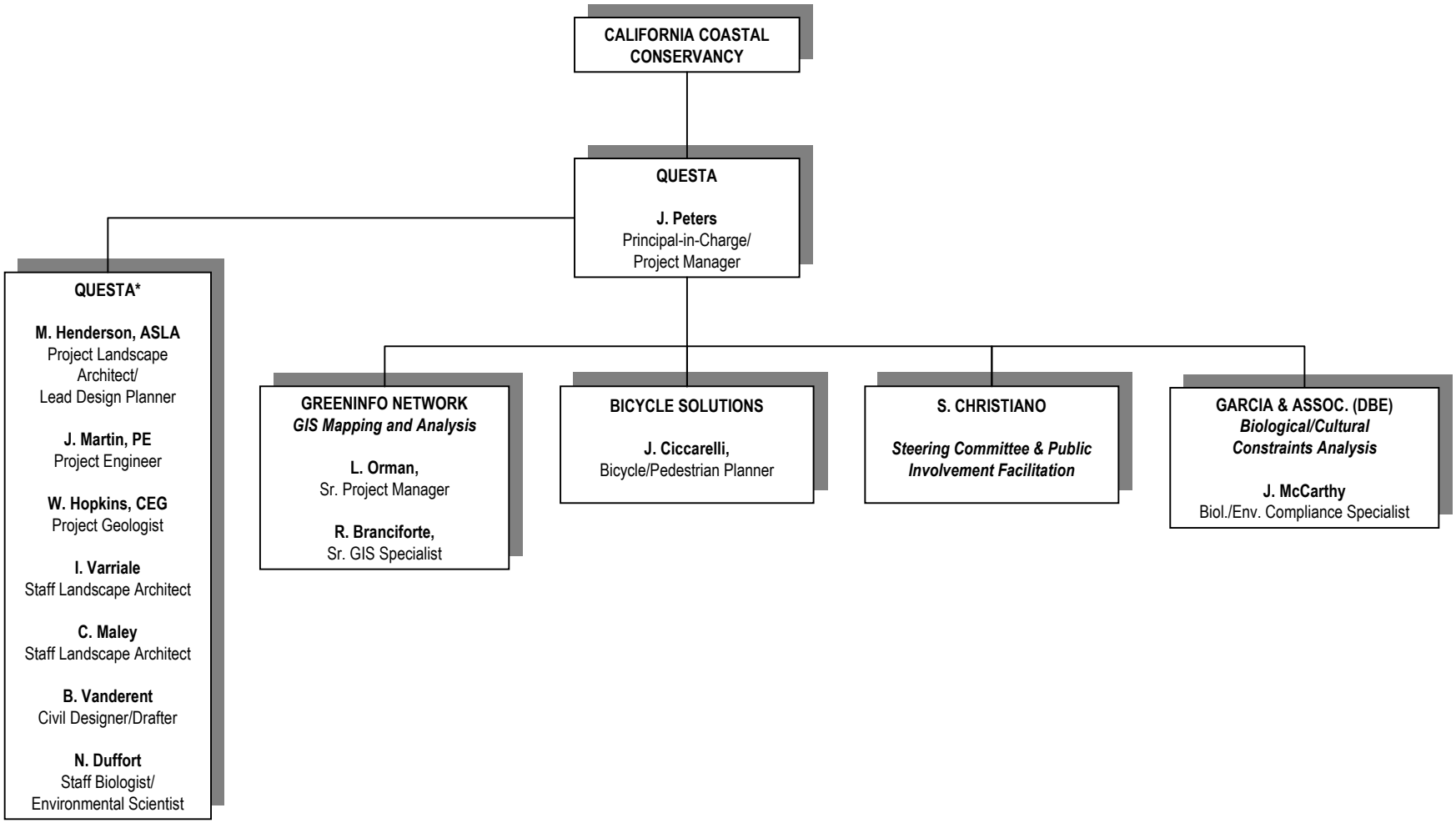
Mr. Jeffrey Peters, Principal, will be the **Principal-In-Charge and Project Manager** responsible for guiding development of the study and the main point of contact with the Conservancy. As a working principal, Mr. Peters will also be a key investigator and oversee the planning process. Mr. Peters has over 30 years of experience in environmental design, natural resource planning and project management. He has managed and implemented numerous resource management and public access projects, including planning for the Bob Jones Trail in San Luis Obispo County, the Petaluma River Access and Enhancement Plan, the Napa River Bay Trail Plan, as well as implementation plans for Shollenberger Wetlands Park and Trail in Petaluma, and the Laguna de Santa Rosa Wetlands Preserve Park Trail in Sebastopol.

Ms. Margaret Henderson, ASLA, will be the **Project Landscape Architect** and **Lead Design Planner**. Ms. Henderson has over thirty years of professional experience as a landscape architect, and environmental planner. She specializes in trail planning for natural areas, planning and policy formulation and resource-based environmental design. Her work ranges from site-specific planning to large-scale master plans, such as the Novato Trails Master Plan, a community-based plan that will provide a network of 100 miles of trails and paths in Marin County. Ms. Henderson worked closely with Mr. Peters on all of the above referenced trail planning and engineering design studies.

Mr. Jeffrey Martin, PE, will be the **Project Engineer** responsible for evaluation of engineering design constraints and design alignment options. Mr. Martin has over 15 years of experience in infrastructure improvement and project management. He has designed and managed the construction of several public access projects, including Marin County's Top Flite Trail, Morgan Hill's West Little Llagas Creek Trail, the City of Fremont's Union Pacific Rails to Trails Project, the Sears Point and Sonoma Baylands Trails in Sonoma County, and other SF Bay Trail projects in Sonoma and Napa Counties. His specialty services include feasibility analysis of overpasses and underpass opportunities for pedestrian crossings, bridges, boardwalks

FIGURE 1. QUESTA TEAM ORGANIZATION CHART

BIG SUR COASTAL TRAIL MASTER PLAN



***Other Questa staff available for in-house consultation include civil and structural engineers, hydrologists, and geomorphologists**

and other trail elements, cost estimation, design and implementation assistance. Mr. Martin is a highly experienced trail engineer, owing a large part of his trail expertise to his off-work activities as an active hiker, bicyclist, and kayaker.

Will Hopkins, CEG, Senior Engineering Geologist, will complete the landslides and geologic constraints analysis. Mr. Hopkins has over 20 years of experience in geological/geotechnical and environmental services for planning and engineering design. His work has included geologic, landslides, and fault investigations. Mr. Hopkins is adept in coordinating geotechnical projects with multiple agencies and firms, and in completing projects on time and within budget. For the past 20 years he has been employed by private consulting firms in the San Francisco Bay Region (almost 15 years at Questa) and has performed various geologic, engineering, and analytical duties. Mr. Hopkins currently is in charge of the Geological and Geotechnical Services Group of Questa, managing and completing projects that include open space, park and trail planning geotechnical investigation and design. As such, he has worked on over a dozen trail feasibility studies.

Additional Questa staff may include **Carl Nelson, PE, Civil Engineer**, **Ian Varriale** and **Corrine Maley, Staff Landscape Architects, Barry Vanderent, Designer/Drafter,** and **Nick Duffort, Staff Biologist/Environmental Scientist.** Resumes are included in **Section 6a.**

GreenInfo Network (San Francisco)

GreenInfo Network will be responsible for all project-related GIS work. GreenInfo Network is a non-profit organization that has provided map-based information to over 100 public interest groups and agencies, most of which are conservation or environmental organizations. They are known for the visual quality of their display and web mapping, as well as for the competence and efficiency of their client relationships and for their extensive GIS technical skill base.

Mr. Larry Orman will be GreenInfo Network's **Senior Project Manager**. Mr. Orman is Executive Director of GreenInfo Network, overseeing all areas of operation and leading strategic communication projects for the organization. He has ten years experience with GIS projects and was previously the executive director of Greenbelt Alliance, the Bay Area's conservation and regional planning non-profit.

Mr. Ryan Branciforte will be GreenInfo Network's **Senior GIS Specialist**. Mr. Branciforte is the lead staffer for their protected lands data development, as well as for the Bay Area Ridge Trail Council, the Bay Area Open Space Council and related organizations and projects in the central California region.

Other members of GreenInfo Network's nine person GIS staff will provide specialized support to the project as needed (examples include use of web-based technologies for supporting group processes and public education, specialized graphic design, etc.).

Bicycle Solutions, Inc. (San Francisco)

Mr. John Ciccarelli, Bicycle/Pedestrian Planner will complete the bicycle improvement opportunity analysis and assist with development of design alignments. Mr. Ciccarelli is an experienced traffic planner and has developed city, county, regional, campus and airport bicycle plans, street corridor striping plans, trail improvement plans, and the Bicycle Accommodation Guidelines for Santa Clara County's expressway system. He is a nationally recognized expert in bicycle safety, pedestrian accommodations and safety crossings, which will be an essential part of the trail plan. In addition, Mr. Ciccarelli is a skilled facilitator and will participate in portions of the outreach effort. As an experienced seminar leader, he has created workshops for Caltrans and Los Angeles County MTA, and teaches classes on bicycle planning and safety through UC Berkeley's Tech Transfer catalog. Mr. Ciccarelli was the first Bicycle Program Manager of Stanford University, where he coordinated circulation and safety improvements throughout the campus. Mr. Ciccarelli worked closely with Questa on completing the Fremont UPRR Trail Feasibility Study and is currently working with Questa on the City of Livermore's Iron Horse Trail Feasibility Study.

Steven C. Christiano

Mr. Steven C Christiano, Consultant, will be the **Steering Committee & Public Involvement Facilitator**. Mr. Christiano has twenty years of experience as a Facilitator / Process Consultant to a wide variety of organizations in the public and private

sector, and a background in non-profit management in the environmental educaton field. Steve has broad experience in organizational development, planning, environmental education, facilitation and the design of complex collaborative group processes. His current clients include major environmental, conservation, educational research, health, and human service organizations. Mr. Christiano recently led a training workshop on conducting design charettes and group processes for trails planning on a statewide level.

Garcia and Associates (DBE) (San Anselmo, California)

Garcia and Associates (GANDA) is a DBE-certified firm specializing in biological and cultural resources. The firm is an on-call consultant to several Caltrans districts for environmental and permitting issues. **Mr. John McCarthy, Biologist/Environmental Compliance Specialist**, will provide as-needed sensitive habitat protocols and biological consultation, as well as review and compilation of archaeological and cultural resource information. Mr. McCarthy is GANDA's San Anselmo Office Regional Manager. He has more than 15 years of experience in completing environmental documents for public and private clients, effectively managing budgets and schedules for both large and small projects. He is experienced in National Environmental Policy Act (NEPA) and California Environmental Quality Act (CEQA) environmental compliance, including gathering baseline data, scoping, public participation, environmental impact analysis, and preparing and reviewing proponents' and regulatory agencies' documentation. He is knowledgeable in a multitude of permitting and formal consultation processes regulated by agencies that include water resource boards, Department of Fish and Game, Army Corps, U.S. Fish and Wildlife, NOAA Fisheries, Bureau of Land Management, and U.S. Forest Service. He has prepared EIR/EISs for transportation and water projects, Initial Studies/ Negative Declarations, Preliminary Environmental Assessment Reports (PEARs) and Natural Environment Studies (NES) for Caltrans, Environmental Assessments (EA) for the U.S. Forest Service, and California Timber Harvest Plans for many private and industrial timberland owners.

4. Relevant Experience

Our study team has worked on many public access and trail planning projects in recent years. We enjoy projects that offer increased opportunities to provide public access and recreational trails. Following are relevant project references for Questa and GreenInfo Network; please see **Sections 6b** and **6c**, respectively, for project portfolio sheets with detailed project descriptions and photos. Project experience for **Bicycle Solutions, Inc**., **Steven C. Christiano**, and **Garcia and Associates**, are integrated in individual staff resumes in **Section 6a**.

Questa

- **Green Valley Trail Design & Feasibility Study - CA Coastal Trail to South of Devil's Slide Tunnel -** Study for pedestrian trail linkage in northern San Mateo County. Planned facilities include parking areas and a 4-foot wide recreational trail. Included review and analysis of site biology, topography, and geotechnical issues and constraints. Trailhead design includes provisions for pedestrian and vehicular use. Final design coordinated with Coastal Conservancy and Caltrans.
  Contact: *Timothy Duff, Project Manager, California State Coastal Conservancy, (510) 286-3826*
- **Bob Jones Multi-Use Path, San Luis Obispo County -** Design feasibility study and preliminary engineering for part of planned City-to-Sea route to provide a continuous Class I recreational trail between the coast at Avila Beach and the City of San Luis Obispo along 6 miles of SLO Creek. Included coordination with Caltrans Local Assistance Program Engineer. Addressed alternative trail alignments, preliminary engineering, design cost estimate, and right-of-way acquisition needs.
  Contact: *Jan Di Leo, County of San Luis Obispo Parks, (805) 781-5900*
- **Napa River Bay Trail Engineering Feasibility Study -** Nearly completed study evaluates new Bay Trail route to connect western end of American Canyon to City of Napa, along Napa River, associated marshlands, and significant infrastructure. Evaluation includes preferred alignment, design, construction costs, and environmental issues.
  Contact: *John Woodbury, Napa County Dept. of Conservation, Development & Planning, (707) 253-4417*

- **Fremont Union Pacific Rail Trail Feasibility Study, Fremont, CA -** Conducted study to determine preferred alignment, project constraints, trail components, acquisition costs, project phasing, and funding options for proposed 9-mile trail corridor adjacent to proposed BART Warm Springs Extension and active rail corridor. Includes sensitivities/constraints analysis, evaluation of trail feasibility, right-of-way acquisition, cost estimation, separation and buffering needs, and extensive coordination and outreach with stakeholders, agencies, and neighborhood groups.
  Contact: *Rene Dalton, Transportation Engineer, City of Fremont, 510-494-4535*

- **San Francisco Bay Trail Project Gap Analysis –** (In association with Alta Planning+ Design), project included mapping existing Bay Trail segments (completed by GreenInfo Network), identifying specific characteristics of gaps in 500-mile Bay Trail system, determining appropriate trail components, and developing cost estimates for identified gaps. Included review of existing Bay Trail Feasibility analyses to determine projected project costs, estimate of construction timeframes, identification of potential funding sources, preparation of summary report, and developing strategy for stakeholder outreach. Questa developed cost methodologies, identified trails needs, types and typical trail sections, and assisted with project phasing and prioritization.
  Contact: *Laura Thompson, Bay Trail Project Manager, Assoc. of Bay Area Governments (ABAG), (510) 464-7935*

- **Marin County Nonmotorized Transportation Pilot Program (NTPP)** – Part of study team (with Alta Planning + Design) to implement a pilot federal $25 million funding program for non-motorized transportation improvements by the year 2010. The project includes extensive outreach and group coordination to develop a priority list for funding and implementation of projects throughout the County, in an equitable manner, and recognizing the need for all types of programs to serve transit needs, including educational programs, signage, street/curb improvements, and specific gap closure efforts. Questa's tasks included project identification, assessing project constraints, prioritization, and estimation of project costs, as well as input on short-listing "constructable" trail projects. Project includes Class I trails, bicycle lanes, pedestrian crosswalks, grade separation projects, and education and outreach programs. Phase I has been completed, and individual trail projects are in the design, permitting and planning phase.
  Contact: *Craig Tackabery, Asst. Dir. of Public Works, County of Marin, (415) 499-6528, or Dan Dawson, Principal Transportation Planner, County of Marin, (415) 499-6287*

GreenInfo Network

- **California Protected Lands Database** - Developing next-generation data set of all protected lands in California, eventually to be hosted by the State's CERES program. Dataset contains every single parcel of protected open space, from tot lots to national parks – wherever possible, based on official assessor parcels (including in Monterey County). This data development has taken many years and has been supported by a number of organizations, foundations and public agencies (including the Calif. Coastal Conservancy).
  Contact: *Bettina Ring, Coordinator, Bay Area Open Space Council, 415-460-1540*

- **ParkInfo.org** – As part of protected lands inventory work, created online, one-stop portal to all protected lands in California, www.parkinfo.org. User-friendly site allows anyone to find parks by address, city/town, or name, driving and transit directions, and printouts of maps and park selections.
  Contact: *Bettina Ring, Coordinator, Bay Area Open Space Council, 415-460-1540*

- **Bay Area Ridge Trail Council** –Lengthy GIS support for Council's efforts to complete major San Francisco Bay Area regional trail system. Developed extensive trail GIS connected to project management database, enabling Council to track trail system gaps and easily generate progress reports. Data system is coupled with a wide array of mapping products, including photo and topographic atlases of entire regional trail corridor.
  Contact: *Janet McBride, Exec. Director, Bay Area Ridge Trail Council, 415-561-2595*

- **Golden Gate National Parks Conservancy** – Core GIS support to multi-agency Coastal Trail project, supported by Moore Foundation. Involved developing data & display mapping for problem solving groups, for support of on-trail group surveys, including creating databases for Recreation Area sign management.
  Contact: *Sharon Farrell, Golden Gate National Parks Conservancy, 415-561-3065*

- **Big Sur Land Trust** –GIS support to Land Trust's planning efforts over many years, developing display maps enabling them to display detailed information about land conservation needs and opportunities. As a result, GreenInfo Network is very familiar with Big Sur Coastal region and related data sets.
  Contact: *Bill Leahy, President, Big Sur Land Trust, (831) 625-5523, x101*
- **ABAG Bay Trail** - GIS, database, mapping and survey support for development of comprehensive data set showing status of each Bay Trail gap. Involved creating database structure for gap information, automated atlas of each jurisdictions trail gaps, online survey for agencies to log in data, and final poster-scale display mapping showing updated trail status.

5. Detailed Budget

Table 2 provides a detailed not-to-exceed budget, broken down by task and key staff member. We understand that a maximum of $175,000.00 is available to complete the Big Sur Trail Plan. In our experience that as we get further into a project with a fixed budget, some issues may become more important than originally scoped and budgeted, and other issues may become relatively less important. Questa and its sub-consultants will be flexible and will work closely with the Conservancy and the project team to adapt to any changing issues requiring more or less attention, investigation, and planning/engineering. In that regard we will continuously monitor our budget and work progress, proposing changes in budget allocation between tasks and among the differing study team members, subject to the review and approval of the client, that in our judgment best utilize the available funds. Questa's Principal-in-Charge and Project Manager, Jeffrey Peters, has managed a number of similar projects, with similar work scopes and technical complexities, and is adept at making in-stream changes to work scope, deliverables, and budgets to get the most out of available funds, with the overall aim of delivering a high quality work product that meets and most often exceeds the client's expectations and needs. In-progress changes are made easier by Questa's accounting system, which is able to track charges by personnel, project, and task number and provides a weekly (daily on demand) progress report on budget utilized, budget available, comparison of percentage of work completed with budget, and other functions that greatly assist in timely project management.

Table 2
Not-to-Exceed Cost Estimate
Big Sur Coastal Trail Master Plan

	RATES AND HOURS											
	QUESTA						GreenInfo Network		Bicycle Solutions	S. Christiano	Totals	
	J. Peters Principal-in-Charge $150	**M. Henderson** Landscape Architect $130	**J. Martin** Project Engineer $130	**W. Hopkins** Project Geologist $135	Staff Planners/ Specialists* $75	Clerical $65	**L. Orman** Sr. Proj. Mgr. $100	**R. Branciforte,** Sr. GIS Specialist $80	**J. Ciccarelli** Bicycle Planner $110	Steering Comm./ Public Facilitator $125	**Total Hours by Task**	**Total Fees by Task**
Project Tasks												
Task 1. Establish Goals and Objectives for Master Plan (2 mtgs)	16	20								28	**64**	**$ 8,500**
Task 2. Prepare Existing Conditions Report	12	24	8	24	24	16	40	80	16		**244**	**$ 24,200**
Task 3. Develop Design Criteria	16	16	8		8	20	29	70	8		**175**	**$ 16,800**
Task 4. Prepare Opportunities and Constraints Analysis	16	32	16	13	28	24	20	80	24		**253**	**$ 25,095**
Task 5. Define the Proposed Trail Alignment(s)	16	36	16		20		20	20	16		**144**	**$ 16,020**
Task 6. Prepare Preliminary BSCT Plan	12	40	8		30	20	4	10	16		**140**	**$ 14,550**
Task 7. Prepare Action Plan	12	16	8		16				20		**72**	**$ 8,320**
Task 8. Prepare Master Plan	12	24	8		24	12	8	24	8		**120**	**$ 12,140**
Task 9. Attend/Facilitate Meetings (8 addl. Meetings)	80	40								98	**218**	**$ 29,450**
Task 10. Project Management (15 progress reports)	30										**30**	**$ 4,500**
Total Hours by Team Member	***222***	***248***	***72***	***37***	***150***	***92***	***121***	***284***	***108***	***126***	***1,460***	***$ 159,575***
Total Labor Cost by Team Member	***$ 33,300***	***$ 32,240***	***$ 9,360***	***$ 4,995***	***$ 11,250***	***$ 5,980***	***$ 12,100***	***$ 22,720***	***$ 11,880***	***$ 15,750***	***-***	***$ 159,575***

* Rate reflects average among multiple staff, including **C. Maley / I. Varriale**, Staff Landscape Architects, **B. Vanderent**, Designer/Drafter, and **N. Duffort**, Staff Biologist/Environmental Scientist

EXPENSES	
1. Travel @ $0.485/mile	$ 2,500
2. Lodging/meals (26 person-days @$150)	$ 4,000
3. Prints, copy, reproduction, misc.	$ 700
****Garcia & Assoc.** (DBE) - as-needed biological & cultural resource consult.	$ 8,200
Total Estimated Expenses	***$ 15,400***
TOTAL COST, EXPENSES & LABOR	***$ 174,975***

** J. McCarthy, Garcia & Assoc., @$115/hour - biological/cultural constraints